



# City of Seattle

Norman B. Rice, Mayor

Seattle Public Utilities

Diana Gale, Director

September 3, 1997

Department of Ecology  
Water Quality Program

SEP 5 1997

*Ann Wessel*  
*Ann Wessel*

VIA FACSIMILE AND U.S. MAIL

Megan White, Program Manager  
Water Quality Program  
Washington State Department of Ecology  
P.O. Box 47600  
Olympia, Washington 98504-7600

Re: Second Year Report under Municipal Stormwater Permit No. WASM23003

Dear Ms. White:

This report is submitted by the City of Seattle pursuant to Special Condition S10 of the National Pollutant Discharge Elimination System (NPDES) and State Waste Discharge General Permit for discharges from municipal separate storm sewers for the Cedar/Green Water Quality Management Area. It covers the 12-month period between January 1, 1996, and December 31, 1996, with updates as appropriate through June 1997. On January 1, 1997, a major reorganization of several City departments became effective, and the newly formed Seattle Public Utilities (SPU) became the successor organization to the Drainage and Wastewater Utility (DWU).

## Status of Implementing Components of the Stormwater Management Program

During 1996, the City and Ecology continued to work toward agreement on the scope and schedule of the City's Stormwater Management Program (SWMP). Three complete drafts were submitted to Ecology (in February, May, and September) for review and comment. The Seattle City Council, through Resolution 29309 dated March 25, 1996, formally concurred with the submittal of proposed programs to Ecology. In April 1997, the City provided a final draft SWMP to Ecology, which then made the decision to proceed to public hearing on the City's proposed SWMP. A public hearing was held on May 15, 1997, and on July 24, 1997, Ecology approved the City's SWMP as being in compliance with the NPDES Municipal Stormwater Permit. Key activities remaining for the rest of 1997 include conducting a thorough assessment of unmet needs and continuing work on the City's Stormwater Management Manual.

## Changes in Permit Coverage Area

There were no changes in permit coverage area in 1996, and none are anticipated in 1997.

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### Expenditures for Components of Stormwater Management Program

In accordance with Section S9 of the permit, a permit modification is required if there is a greater than 20-percent difference between the *projected* annual budget values contained in the City's SWMP (Table 9.7 in the SWMP) and the actual budget *adopted* by the City Council. Stormwater budgets for 1997 and 1998 had already been adopted by the time the City's SWMP received final approval by Ecology, and therefore comparisons between projected and adopted budgets cannot be provided for these years. Table 1 shows the adopted and projected overall stormwater management program budgets for the remaining term of the permit.

**Table 1—Overall Stormwater Management Program Budget for Remainder of the Permit Term**

Category	Adopted	Adopted	Projected	Projected
	1997	1998	1999	2000
Stormwater Management Programs <sup>1</sup>	\$2,441,326	\$2,481,200	\$2,555,636	\$2,632,305
Drainage and Wastewater Operations Division	\$2,690,598	\$3,066,423	\$3,158,416	\$3,253,168
Total Annual Budget	\$5,361,729	\$5,547,623	\$5,714,052	\$5,885,474

<sup>1</sup> Includes Regulatory, Water Quality, and Public Involvement & Education programs. Category was formerly titled "Resource Planning Division (Drainage-Related)" in Table 9.7 of SWMP.

### Revisions to Fiscal Analysis Contained in Stormwater Management Program

The adopted budget for Drainage and Wastewater Operations Division was changed after the final draft SWMP was submitted to Ecology. The value given in Table 9.7 of the SWMP (\$2,920,403) should now read \$2,690,598, as listed above in Table 1.

### Compliance Actions

During 1996, the Department of Construction and Land Use (DCLU) issued six Notices of Violation related to the Stormwater, Grading and Drainage Control Code, and 11 Notices of Violation related to the Environmentally Critical Areas Code. In addition, two Emergency Orders were issued as a result of the severe winter storms in late 1996. For the first six months of 1997, DCLU issued three Notices of Violation related to the Stormwater, Grading and Drainage Control Code, three Notices of Violation related to the Environmentally Critical Areas Code, and 24 land slide-related Emergency Orders.

### Investigations

SPU responded to approximately 100 stormwater drainage-related complaints during 1996 and to approximately 120 complaints from January 1 through June 30, 1997. Water quality investigators responded to 142 water quality complaints (See Section WQ-2 of SWMP) in 1996, and to 98 surface water quality complaints between January 1 and June 30, 1997. Details of water quality complaint responses are shown in Table 2.

**Table 2—Surface Water Quality Complaint Activities**

	Complaints	Site Visits	Letters	Referrals	Resolved
Jan - Dec 1996	142	105	26	27	142
Jan - Jun 1997	98	72	37	14	97

### Inspections

In 1996, there were 740 drainage and drainage related permits issued by the Street Use Department, and 322 permits have been issued through the first six months of 1997. All of these sites have been, or are scheduled to be, inspected for compliance with applicable City codes (See Section R-0 of SWMP).

In 1996, TV inspections (See Section OM-3 of SWMP) were completed on 403,092 linear feet of sewer or combined sewer mainlines and 120,771 linear feet of separated storm drain mainlines. Through June 1997, 202,282 linear feet of sewer or combined sewer mainlines and 17,522 linear feet of separated storm drain mainlines have been inspected.

During 1996, 168 business inspections were conducted as part of source control activities (See Section WQ-3), and inspectors have conducted 116 business inspections between January 1 and June 30, 1997. A summary of business inspections is shown in Table 3.

**Table 3—Business Inspections**

	Targeted No. of Businesses	On-Site Inspection	Windshield Inspection	Other <sup>1</sup>
Jan - Dec 1996	168	66	92	10
Jan - Jun 1997	116	41	48	27

<sup>1</sup> "Other" in business inspections refers to locations that were located along a waterfront, no longer in business, or determined to be connected to combined sewer systems.

In 1996, as part of the private detention systems inspection program, (See Section OM-5), there were 207 site visits conducted during the year, of which 67 were initial inspections and the remaining 140 were a continuation of the previous year's schedule. Inspections typically included a determination of system status, owner education of maintenance requirements and applicable City codes, and a follow-up letter sent containing additional information. In 1997, nine initial inspections and 13 follow-up visits were conducted before the inspector position became vacant. The inspector position is expected to be filled late in 1997.

### Public Education Activities

SPU continues to sponsor water quality education programs in 105 Seattle schools. The Salmon in the Classroom program helps schools raise salmon fry from eggs for release into local creeks through City-sponsored field trips. Schools are also sent on field trips to the Seattle Aquarium, University of Washington Fish Hatchery, Burke Museum, and Springbrook Trout Farm. Over 10,000 salmon fry were released during the 1995-1996 school year.

Seattle, King County, Tacoma, Bellevue and the Department of Ecology formed the *Water Quality Consortium* in 1996 to develop a mass media education campaign. Two television and four newspaper advertisements were produced for local markets. The total value of the campaign exceeded \$1 million. Samples of the public education material developed by the Consortium are enclosed.

In 1996, a grant was received from the Puget Sound Water Quality Authority that enabled DWU to develop an interactive multi-media education program based on DWU's award winning, "*Water You Doing?*" video. The CD-ROM project, completed in early 1997, includes 22 interactive enhancements based on water quality topics covered in the video. The program enables students to learn about surface water resources and their protection, and is being distributed free of charge to local schools. A copy of the CD-ROM is enclosed.

Source control education in the Lake Union and Elliott Bay/Duwamish watersheds during 1996 included development of best management practice information sheets that have been made available to the business community. Copies of these information sheets are enclosed. In addition, DWU completed the production and issuance of a series of five newsletters about protecting water quality that featured articles about protection techniques, regulations, sources of assistance and individual business profiles. Highlights of the City's storm drain stenciling program are provided in Table 4, which shows that during the past 18 months over 2500 storm drains were stenciled with the message, "DUMP NO WASTE, DRAINS TO [STREAM/LAKE/BAY]."

**Table 4—Storm Drain Stenciling**

1996	Community Group	Estimated No. of Drains Stenciled
June	29 schools participating in the "Salmon in the Classroom Program" stencil drains around their school.	987
April	Downtown Business Improvement Association (BIA) stencil drains in the vicinity of the waterfront.	47
June	Queen Anne Girl Scouts	39
October	Seattle Pacific University stenciled drains around the school during Student Community Service Day.	65
August	Central Area Motivation Post (CAMP) summer program students stenciled storm drains in the Central District of Seattle	92
October	Greek system pledges stenciled storm drains near the University of Washington.	38
<b>1997</b>		
June	51 schools participating in "Salmon in the Classroom Program" stencil drains around their school.	1,150
June	Volunteers from Seattle Central Community College stenciled drains along Broadway Avenue and selected side streets.	75
July	Lake City Community Council	29

Stewardship through Environmental Partnerships Program

The City's STEP Program (See Section PI-1) provides funding for small-scale projects of up to \$5,000 that promote stewardship and protection of water quality. During 1996, approximately \$44,000 were allocated to 16 projects city-wide. A summary of 1996 projects is shown in Table 5.

Known Changes in Water Quality

Based on the City's data, there were no known significant changes in the water quality of the City's receiving water bodies, as measured by chemical analysis. As part of the City's source control program,

**Table 5—STEP Grant Funding Summary for 1996**

<b>Name of Project</b>	<b>Project Description</b>	<b>Funds</b>
Mt. Baker Weir & Stream	The project repaired the creek weirs and restored native plants along the riparian corridor of the creek in Mt. Baker Park.	\$4,947.00
Watershed Awareness Project	As part of the project, the boundaries of the watershed were identified, signs were posted, and surveys were conducted at several local sites on issues affecting the watershed.	\$2,000.00
Mapes Creek Community Education Art	The purpose of this project was to adopt and clean up a portion of Mapes Creek, and to educate the community about a neighborhood treasure.	\$2,780.00
Laurelhurst Elementary School	Laurelhurst and other watershed schools have taken on the task of restoring native vegetation to Ravenna Creek's riparian corridor.	\$2,784.00
Cascade P-Patch Rainwater Collector	The project will divert some of the rainwater runoff from area buildings to water barrels for storage. The stored water will be used to water the pea-patch throughout the year.	\$2,893.00
Wetland Boardwalk and Viewing Platforms	This project protected an existing wetland and gave the community another place for students to learn about water quality and the environment.	\$3,508.00
Seward Park Water Quality Pilot Field Trip	The project establishes Seward Park as a hands-on classroom to make children aware of the watershed in their own backyard.	\$3,350.00
Nathan Hale High School	The group removed invasive plants from the site and stabilized the bank by spreading wood chips and replanting native vegetation to improve habitat for salmon and wildlife.	\$678.00
Spruce Street School, Native Plant Garden	The project will provide a healthy natural space with native plants for the students and community to learn about water quality and conservation practices in their own backyard.	\$1626.00
Department of Neighborhoods (DON) Partnership	STEP funds supplemented a DON-funded project that hired students from the community to work on trails, remove invasive plants, and other stewardship projects in the watershed.	\$3,900.00
Seattle Conservation Association (SCA)	Over 3,000 volunteers came together for Earth Day 96 to clean-up, enhance, restore, and revegetate along streams, stream-side trails.	\$4,360.00
Seattle Spring Clean	DWU joined with the Central area community, Seattle Schools, and DON to clean up empty lots and restore natural habitat destroyed by dumping.	\$625.39
Water Watchers of West Seattle	DWU helped the group solve erosion problems at a site located on a hill in West Seattle, providing plants, gravel, and partial funding for signage..	\$4,770.00
Carkeek Park Playground Improvements	This project is designed to provide a safe play area with a watershed theme. It will also protect sensitive habitat along the creek, and teach kids the importance of clean water.	\$4,998.84
Marine Business Canal Cleanup	American Waterways Operators, Seattle Marine Business Coalition, Puget Soundkeeper, Corps of Engineers, and DWU worked together to remove debris from Puget Sound, along the ship canal from the Hiram Chittenden Locks to the Fremont Bridge.	\$250.00
Miscellaneous	Miscellaneous expenses	\$300.00
<b>Total</b>		<b>\$43,770.23</b>

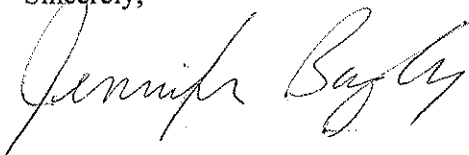
any significant deviations from expected values are investigated for potential illicit connections or illegal discharges.

Status of Watershed-wide Coordination and Activities

The NPDES Permittee Interagency Work Group, whose members represent the NPDES-permitted municipalities, met on a number of occasions during 1996 and 1997 to discuss stormwater management planning issues. The City continued its involvement with the Interagency Regulatory Analysis Committee and the Lake Union Action Team. The City also has a representative who sits on the board of the University of Washington's Center for Urban Water Resources Management. The City is involved in two grant-funded programs with Washington State Department of Transportation involving best management practice technologies. SPU regularly attends the American Public Works Association Stormwater Managers' Committee Meetings, and the City regularly staffs, or provides input to, state and local committees working on water quality and sediment contamination issues. The Drainage and Wastewater Utility Citizen Advisory Committee (DWUCAC) last met on September 24, 1996. Options concerning a successor organization to DWUCAC that will support SPU are being evaluated.

If you have any questions concerning this report or pertaining to the City of Seattle's Stormwater Management Program, please contact Robert D. Chandler at 206-684-7597 or by e-mail at [robert.chandler@ci.seattle.wa.us](mailto:robert.chandler@ci.seattle.wa.us).

Sincerely,



Jennifer Bagby, Acting Director  
Resource Management Division

JB/RDC:rdc

cc: Ann Wessel, Washington State Department of Ecology  
Krista Matthiesen, King County Department of Natural Resources  
Robert Chandler, Seattle Public Utilities  
Cheryl Paston, Seattle Public Utilities  
Neil Thibert, Seattle Public Utilities



# City of Seattle

Paul Schell, Mayor

## Seattle Public Utilities

Diana Gale, Director

March 20, 1998

Ann Wessel  
Water Quality Program  
Washington State Department of Ecology  
P.O. Box 47600  
Olympia, Washington 98504-7600

WATER QUALITY  
PROGRAM

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Re: Second Year Report under Municipal Stormwater Permit No. WASM23003

Dear Ms. Wessel:

Please attach the below certification to our Second Year report dated September 3, 1997. It was inadvertently omitted from the original submittal.

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for willful violations.

If you have any questions concerning this matter, please contact Robert Chandler at 206-684-7597 or by e-mail at [robert.chandler@ci.seattle.wa.us](mailto:robert.chandler@ci.seattle.wa.us).

Sincerely,

Tim Croll, Director  
Resource Management Division

TC/RDC:rdc

cc: Melodie Shelby, Washington State Department of Ecology  
Robert Chandler, Seattle Public Utilities  
Neil Thibert, Seattle Public Utilities  
Theresa Wagner, Seattle City Attorney's Office

